Amendments to the Claims

1. (currently amended) A device comprising:

a Digital Signal Processor (DSP) module enabled to receive an analog telephone signal to convert the analog telephone signal to a digital telephone signal and further to packetize the digital telephone signal for transmission to a remotely-located device~~,~~;

the device and the remotely-located device enabled to negotiate a first type of codec by each sending to the other a list of one or more types of codecs that each supports and each deciding to use a mutually supported codec through the use of a predetermined protocol~~,~~; and

during communications between the remotely-located device and the DSP module, the DSP module enabled to renegotiate ~~the use of~~ a second type of codec, wherein the renegotiation is triggered upon detection of degradation in voice quality by the remote device, and

the DSP module to dynamieally switch to ~~using~~ the second codec only if the device determines that the second codec is available therein ~~upon detection of signal degradation based on statistics from the DSP module~~,

wherein, the type of codec being utilized may be repeatedly, mutually, renegotiated to dynamically change compression techniques and switching between the codecs is performed during a call.

2. (previously presented) A device as recited in claim 1 wherein switching between the codecs is initiated by a user of one of the telephone devices.

3. (previously presented) A device as recited in claim 2 wherein a predetermined code is assigned to correspond to each codec wherein the user specifies the type of codec to be switched to by entering the predetermined code corresponding to a desired codec.

4. (previously presented) A device as recited in claim 3 wherein the

predetermined code is programmably-alterable.

5. (previously presented) A device as recited in claim 1 further comprising the device enabled to switch from a codec resulting in the use of larger packet sizes to a codec resulting in smaller packet sizes in response to detecting a lower available bandwidth on a packet switching network.

6. (previously presented) A device as recited in claim 5 wherein the device is configured to automatically detect the lower bandwidth.

7. (previously presented) A device as recited in claim 1 wherein upon detecting higher bandwidth available on packet switching network, the device is enabled to switch from a codec resulting in the use of smaller packet sizes to a codec resulting in higher packet sizes.

8. (previously presented) A device as recited in claim 5 wherein the device is enabled to automatically detect the higher bandwidth.

9. (previously presented) A device as recited in claim 1 wherein the remotely-located device is enabled to detect the degradation in the quality of the voice information.

10. (previously presented) A device as recited in claim 1 wherein the degradation in the quality of the voice information is due to loss of one or more packets.

11. (previously presented) A device as recited in claim 10 wherein a threshold defines the number of lost packets that are tolerated and the device is enabled to trigger a decision to switch to the second type of codec.

12. (previously presented) A device as recited in claim 11 wherein a plurality of packets form a message and each packet includes a sequence number indicative of the position of the packet with respect to other packets in the same message, the sequence numbers of the same

message being in sequential order wherein a loss of packets is detected when one or more sequence numbers are missing from the received packets of the same message.

13. (previously presented) A device as recited in claim 1 wherein the degradation in the quality of the voice information is due to an intolerable delay associated with the time for a packet to travel between the deviee and the remotely located device.

14.-16. (canceled)

17. (currently amended) A method comprising:

receiving at a first router an analog telephone signal through a telephone connection from a first telephone device;

converting the analog telephone signal to a digital telephone signal;

separating information carried on the digital telephone signal into packets of information;

initially, mutually, negotiating with a second router a first type of codec for communication with a second telephone device, by each sending to the other onc or more types of codecs that each supports and each deciding to use a mutually supported codec through the use of a predetermined protocol;

using a first type of codec for transferring the packets of information between the first and second router through a packet switching network;

during communication between the telephone devices, the first and second router renegotiating the use of a seeond type of codec, wherein the renegotiation is triggered upon detection of degradation in voice quality by the second router;

switching to using the second type of codec only if the first router determines that the second codec is available therein ~~upon detection of degradation in the quality of the voice information during the course of the telephone connection~~; and

during communication between the telephone devices, upon further detection of ~~signal~~ degradation in voice quality by the second router, repeatedly renegotiating to dynamically change compression.

18. (previously presented) A device as recited in claim 1 wherein the codec negotiation is performed pursuant to the H.245 protocol.

19. (previously presented) A device as recited in claim 1 wherein the first type of codec includes a compression/decompression algorithm defined by any one of the standards: G.711, G726, G729 or G723.1 and the second type of codec utilizes a compression/decompression algorithm defined by any one of the standards: G.711, G726, G729 or G723.1.

20. (canceled)